

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 06/14/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

REMARKS

Amendments to the Claims

Claims 1-8 and 10-30 are pending in the present application. Claim 9 has been previously canceled. No additional claims fee is believed to be due.

Claims 1, 16, 19, and 28 have been amended as shown above to recite that the respective compositions are "substantially free of organic peroxyacid precursors and preformed organic peroxyacids". Support for this amendment can be found at page 18, lines 5-14 of the specification.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

Rejections Under 35 USC 102(b) and 103(a) Over US Patent No. 6,004,355 to Dias et al.

Claims 1-8, 11-15, 17, 19-27, and 29 remain rejected under 35 USC 102(b) as being anticipated by, or, alternatively, under 35 USC 103(a) as being obvious over, US Patent No. 6,004,355 to Dias et al. ("Dias"). As set forth in the Office Action of July 14, 2004, the Examiner asserts that Dias teaches a hair coloring composition comprising an oxidizing agent and a sequestrant (chelant), wherein the composition has a pH of 10, wherein the composition is an aqueous solution, wherein the oxidizing agent comprises from 0.1% to 4% of aqueous hydrogen peroxide, wherein the chelant is present at an amount from 0.01% to 10%, and wherein the composition further comprises an oxidative dye precursor. The Examiner also asserts that Dias teaches a kit comprising an oxidizing agent and one or more coloring agents.

The Examiner then asserts that because Dias teaches the same hair treating ingredients of Applicants' claimed composition, the compositions of Dias would inherently have the same physical properties of damage benefit, log ratio, hydrogen peroxide decomposition ratio, normalized shine ratio, and ability to form a hexadendate complex with Cu^{2+} . Thus, the Examiner concludes that Dias anticipates Applicants' claims. Alternatively, the Examiner asserts that it would be obvious to one of skill in the art that the compositions of Dias would have similar physical properties as those claimed by Applicants, absent unexpected results. Applicants respectfully traverse the present rejection based on the following comments.

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First, Dias is not anticipatory because it fails to disclose each and every limitation of Applicants' claims. As currently amended, Applicants' claim 1 recites a composition comprising (i) an oxidizing agent and (ii) a chelant, wherein the composition has a pH from about 9.5 to about 11, *wherein said composition is substantially free of organic peroxyacid precursors and preformed organic peroxyacids*, and wherein the chelant is in an amount sufficient to provide a damage benefit of less than about 160 cysteic acid units as measured by the FT-IR Damage Assessing Protocol after a 5-Cycle Oxidative Hair Treatment Protocol With 2 Intermediate Washes.

Applicants' compositions provide a good lightening effect to hair during oxidative treatments, such as bleaching and dyeing, which are carried out in the pH range claimed by Applicants, yet result in less damage to the hair than that which occurs during the use of known oxidative treatment compositions. It is believed that the chelants in Applicants' compositions act to chelate environmental and intrinsic heavy metal ions which would otherwise react with the oxidizing agent to give harmful species, such as free radicals, which damage the hair by oxidizing the disulfide bonds of hair. Further, at Applicants' claimed pH range, the presence of organic peroxyacid precursors and preformed organic peroxyacids have a negative effect on the efficiency of bleaching and coloring and also increase hair damage.

Dias discloses hair color compositions which require as components a peroxygen oxidizing agent, *an organic peroxyacid oxidizing aid*, and oxidative hair color agents. Dias teaches that the organic peroxyacid precursor oxidizing aid is an essential feature of the invention of Dias because it provides enhanced dye oxidation in a faster time at a lower pH. Because the compositions of Dias require an organic peroxyacid oxidizing aid, Dias fails to teach a composition which is substantially free of organic peroxyacid precursors and preformed organic peroxyacids.

As a result, each and every element of Applicants' claim 1, as well as claims 2-8, 11-15, and 17, which contain the limitations of claim 1, is not disclosed in Dias. Additionally, an argument analogous to that for claim 1 applies to Applicants' claim 19, as well as claims 20-27 and 29, which contain the limitations of claim 19. Therefore, Applicants' claims 1-8, 11-15, 17, 19-27, and 29 are novel over Dias.

Second, Applicants' claimed invention is not obvious in view of Dias. Dias does not teach or suggest all of Applicants' claim limitations and, therefore, does not establish

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a *prima facie* case of obviousness (MPEP 2143.03). As discussed above, Dias fails to teach or suggest a composition which is substantially free of organic peroxyacid precursors and preformed organic peroxyacids. Instead, Dias teaches away from such a composition because the compositions of Dias further require an organic peroxyacid precursor oxidizing aid as an essential feature. Therefore, Dias fails to establish a *prima facie* case of obviousness with respect to Applicants' currently amended claims.

Alternatively, Applicants' claimed invention is not obvious in view of Dias because the Declaration of Jennifer Mary Marsh ("the Marsh Declaration"), submitted herewith, demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. As is demonstrated in the Marsh Declaration, an exemplary composition of the present invention (*i.e.*, Product 5) is about about three times less damaging per unit of lightening achieved, at the total oxidant level required by the 5-Cycle Oxidative Hair Treatment Protocol With 2 Intermediate Washes, as compared to the tested products based on the compositions of Dias and at pH 8 (*i.e.*, Products 1 and 2). Additionally, the Marsh Declaration demonstrates that Product 5 is almost two times less damaging per unit of lightening achieved as compared to the tested product based on the compositions of Dias and at pH 10 (*i.e.*, Product 3). Applicants respectfully submit that such lightening and hair damage results are clearly superior over the performance of the compositions of Dias. Accordingly, the Marsh Declaration demonstrates that the compositions of the present invention, which are substantially free of organic peroxyacid precursors and preformed organic peroxyacids, possess superior and unexpected properties over the compositions of Dias, which require an organic peroxyacid as part of the oxidizing system.

Therefore, Applicants' claims 1-8, 11-15, 17, 19-27, and 29 are novel and nonobvious over Dias.

Rejections Under 35 USC 103(a) Over US Patent No. 6,004,355 to Dias et al. in view of US Patent No. 5,100,436 to Wenke

Claim 10 remains rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,004,355 to Dias et al. ("Dias") in view of US Patent No. 5,100,436 to Wenke ("Wenke"). As set forth in the Office Action of July 14, 2004, the Examiner asserts that Dias teaches hair coloring compositions, as described above, wherein the compositions

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are thickened aqueous compositions. The Examiner notes that Dias does not teach a hair treatment composition in the form of an oil-in-water emulsion. Then, the Examiner asserts that Wenke teaches a composition comprising oxidative dye precursors, oxidizing agents, and chelating agents, wherein the composition may be in the form of an emulsion, suspension, lotion, or gel. Thus, the Examiner concludes that it would have been obvious to one of skill in the art to formulate the composition of Dias in an emulsion because Wenke teaches different forms of hair dyeing compositions, absent unexpected results. Applicants respectfully traverse the present rejection based on the following comments.

The combination of Dias and Wenke does not teach or suggest all of Applicants' claim limitations and, therefore, does not establish a *prima facie* case of obviousness (MPEP 2143.03). Applicants' claim 10 contains the limitations of claim 1. As discussed above, Applicants' claim 1, as currently amended, recites a composition which is substantially free of organic peroxyacid precursors and preformed organic peroxyacids. Dias teaches away from such a composition because the compositions of Dias further require an organic peroxyacid precursor oxidizing aid as an essential feature.

Additionally, although Wenke discloses that its compositions may be in the form of an emulsion, one of skill in the art would not be motivated to formulate the composition of Dias into an emulsion because the peroxyacid oxidizing aids of Dias, which are required components of the compositions of Dias, are difficult to solubilize, especially in an oil-in-water emulsion.

Therefore, the combination of Dias and Wenke fails to establish a *prima facie* case of obviousness with respect to Applicants' currently amended claim 1, as well as Applicants' claim 10. As a result, Applicants' claim 10 is novel and nonobvious over Dias in view of Wenke.

Alternatively, Applicants' claim 10 is not obvious over Dias in view of Wenke because, as discussed above, the Marsh Declaration demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. Although Wenke discloses that its hair coloring compositions may be in the form of emulsions, suspensions, lotions, or gels, Wenke fails to provide a teaching or suggestion for achieving the superior results of Applicants' claimed compositions.

Therefore, Applicants' claim 10 is novel and nonobvious over the combination of Dias and Wenke.

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Rejections Under 35 USC 103(a) Over US Patent No. 6,004,355 to Dias et al.

Claims 16, 18, 28, and 30 remain rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,004,355 to Dias et al. ("Dias"). The Examiner asserts that Dias teaches methods for coloring hair comprising the steps of applying compositions that comprise an oxidizing agent, oxidation dye precursors, and chelating agents. The Examiner notes that Dias does not teach Applicants' claimed methods with sufficient specificity to constitute anticipation of the claims. However, the Examiner asserts that it would have been obvious to one of skill in the art to use the methods of Dias with a composition that comprises similar ingredients to the compositions of Dias. Applicants respectfully traverse the present rejection based on the following comments.

As currently amended, Applicants' claim 16 recites a method which requires (i) applying a first composition comprising an oxidizing agent, (ii) applying a second composition comprising a chelant wherein the chelant is in an amount sufficient to provide a damage benefit of less than 160 cysteic acid units as claimed, and (iii) applying a third composition comprising an oxidizing agent, wherein said first and third compositions have a pH from about 9.5 to about 11, wherein the first and third compositions are substantially free of organic peroxyacid precursors and preformed organic peroxyacids, and wherein the steps are carried out as claimed. Applicants' first and third compositions of claim 16 protect hair from damage that occurs during oxidative treatments, such as bleaching and dyeing, which are carried out using water-soluble inorganic peroxygen oxidizing agents in the pH range claimed by Applicants.

In contrast, Dias discloses methods which comprise applying hair color compositions comprising a peroxygen oxidizing agent, *an organic peroxyacid oxidizing aid*, and oxidative hair color agents, wherein the compositions impart minimal damage to hair fibers at lower pH. Because the compositions of Dias require an organic peroxyacid oxidizing aid, Dias fails to teach a method which comprises contacting hair with a composition which is substantially free of organic peroxyacid precursors and preformed organic peroxyacids. Therefore, Dias fails to establish a *prima facie* case of obviousness with respect to Applicants' currently amended claims.

Alternatively, Applicants' claimed methods are not obvious in view of Dias because the Marsh Declaration demonstrates that the compositions of the present

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invention possess superior and unexpected properties over the compositions of Dias. As discussed above, the Marsh Declaration demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. Product 5 is about three times less damaging per unit of lightening achieved as both Products 1 and 2, and almost two times less damaging per unit of lightening achieved as Product 3.


Accordingly, Applicants' claim 16 would not have been obvious to one of ordinary skill in the art. Claim 18 contains the limitations of claim 1, which was discussed above. Additionally, an argument analogous to that for claim 16 applies to the method of claim 28. Claim 30 contains the limitations of claim 19, which was discussed above. Therefore, Applicants' claims 16, 18, 28, and 30 are novel and nonobvious over Dias.

CONCLUSION

In light of the amendments and remarks presented herein, it is requested that the Examiner reconsider and withdraw the present rejections. Early and favorable action in the case is respectfully requested.

Applicant has made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, Applicant respectfully requests reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1-8 and 10-30.

Respectfully submitted,
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